



CERTIFICATE OF MAILING (37 C.F.R. §1.8)

I hereby certify that this paper, together with all enclosures identified herein, are being deposited with the United States Postal Service as first class mail, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on or before August 1, 2005.

8/1/05
Date

William L. King III
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of : Kloeppner et al.
Examiner : Philip C. Tucker
Serial No. : 10/662,665
Group Art Unit : 1712
Confirmation No. : 1885
Filed : September 15, 2003
Attorney Docket No. : GEN-011131 C1
Title : ELECTROCHROMIC MEDIUM HAVING A SELF-
HEALING CROSS-LINKED POLYMER GEL AND
ASSOCIATED ELECTROCHROMIC DEVICE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF DR. LEROY J. KLOEPPNER UNDER 37 C.F.R. § 1.132

I, Dr. Leroy J. Kloeppner, to the best of my knowledge, hereby swear that the following statements are truthful and accurate:

1. I am presently employed, as Senior Research Chemist, by Gentex Corporation, the Assignee of the above-identified patent application.

2. As Senior Research Chemist, my responsibilities include, among other things, managing, designing, and developing state of the art technology associated with electrochromic devices, and more particularly, electrochromic windows and mirrors, associated electrochromic processes, unique fabrication processes and the design and development of state of the art chemicals, including polymers, for incorporation into such electrochromic devices and/or associated processes.

3. My educational background includes the following:

- B.S., Chemistry, 1990, St. Cloud State University;
- M.S., Chemistry, 1993, University of Rochester; and
- Ph.D., Chemistry, 1998, University of Florida

4. I am one of the co-inventors of the subject matter claimed in the present application.

5. An electrochromic polymer gel was prepared in accordance with Example 6 of U.S. Patent No. 5,679,283, which is the same as Example 6 of U.S. Patent No. 5,928,572.

6. An electrochromic polymer gel was prepared in accordance with Example 15 of U.S. Patent No. 5,928,572.

7. Thermal shock testing was conducted in accordance with the protocol set forth in U.S. Application Serial No. 10/662,665 for the electrochromic polymer gel identified in paragraph 5.

8. Thermal shock testing was conducted in accordance with the protocol set forth in U.S. Application Serial No. 10/662,665 for the electrochromic polymer gel identified in paragraph 6.

9. Thermal shock observations of the testing identified in paragraph 7 were as follows: (1) signs of defects/irregularities (e.g. wormholes) were observed for a majority of the devices after being placed into a -40°C freezer; and (2) after allowing the devices to warm to room temperature at the end of the last cycle, a majority of the devices showed signs of defects/irregularities and two of the devices included wormholes that did not completely close. As such, Example 6 of U.S. Patent No. 5,679,283, which is the same as Example 6 of U.S. Patent No. 5,928,572, does not exhibit the self-healing characteristics of the cross-linked polymer gel as disclosed and claimed in U.S. Application Serial No. 10/662,665.

10. Thermal shock observations of the testing identified in paragraph 8 were as follows: (1) signs of defects/irregularities (e.g. wormholes) were observed for a majority of the devices after being placed into a -40°C freezer; and (2) after allowing the devices to warm to room temperature at the end of the last cycle, a majority of the devices showed signs of defects/irregularities. As such, Example 15 of U.S. Patent No. 5,928,572, does not exhibit the self-healing characteristics of the cross-linked polymer gel as disclosed and claimed in U.S. Application Serial No. 10/662,665.

11. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Title 18 of the United States Code § 1001, and that such willful false statements may jeopardize the validity of the application or any patent issuing therefrom.

Dated: 8/1/2005

Leroy J. Kloeppner
Dr. Leroy J. Kloeppner
Senior Research Chemist

GENTEX CORPORATION
600 North Centennial Street
Zeeland, Michigan 49464
Phone (616) 772-1800
Facsimile (616) 772-5223